

Becoming a techie and improving your English with Audiovisual Translation. The two-for-one formula offered by TRADILEX

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Audiovisual translation (AVT) as a tool in the teaching/learning of a foreign language has increasingly attracted the attention of researchers in the latest years. The TRADILEX Project team is currently working on the pedagogic use of AVT in the teaching /learning of English as a Foreign language (EFL) in an online environment, in a good number of Spanish universities. This paper presents the results of the TRADILEX experience, carried out at the University of Zaragoza (Spain). The methodology designed and applied for that end has required the use of technological tools to guide students through different steps, from an Initial Test of Integrated Skills (ITIS) to a Final Test of Integrated Skills (FITIS), both designed by members of the team. On their way from the former to the latter, students were invited to carry out a series of B1-level tasks in five AVT modes. The materials previously designed and tested intended a progressive autonomy of the student in their advance in the lesson plans of each mode. The analysis of the results obtained in each of the AVT modes, as well as the comparative results between the ITIS and the FITIS will highlight the virtues of the methodology used.

Keywords: Audiovisual Translation, AVT modes, use of ICTs, EFL Learning, TRADILEX

1. Introduction

The didactic use of audiovisual translation (AVT) for the teaching and learning of English as a Foreign Language (EFL) started being explored at the turn of the century. However, it is in the last decade, and as a result of the integration and application of the different modalities of AVT with a didactic purpose in the classroom, that there has been a considerable growth in the number of research works in this field (Couto-Cantero, Sabaté-Carrové, and Gómez Pérez 2021, 79). Thanks to this methodology, learners become active participants in their learning process by engaging in subtitling, dubbing, voice over or audio description (AD) tasks, among others, where they have to

transfer the source message into written form, or an alternative and more creative one (Talaván and Lertola 2022, 24).

In the last two decades, the potential of AVT didactics has been recognised by scholars and institutions that have invested their time in the creation of specific courses and research projects. The proliferation and popularity of AVT modes used in FLL is due to a cumulative effect brought about by many different researchers working with different AVT modes.

Thus, AVT research is experiencing its apogee, as Ávila-Cabrera and Rodríguez-Arancón (2021, 156) highlight by saying that “we are in fact witnessing a flourishing era in the field of AVT both professionally and in academia” and this also regards AVT research in the particular context of foreign language, as the numerous publications prove. The first AVT mode to be used as a didactic resource was subtitling, which has been consolidated as one of the most researched AVT modes. Scholars have primarily studied the use of subtitles for the development of a series of skills, such as listening comprehension (Bird and Williams 2002; Danan 2004; Hsu et al. 2013; Talaván and Rodríguez-Arancón 2014), intercultural knowledge (Borghetti 2011), writing skills (Talaván, Lertola and Costal 2019), pragmatic awareness (Incalcaterra-McLoughlin and Lertola 2016), and vocabulary acquisition (Lertola 2018, 2019b; Torralba-Miralles 2020; Teng 2022). With regard to revoicing activities, attention has been mainly centred on dubbing as a way to improve learners’ reading and writing skills, for instance when reading and producing their own scripts for a creative dubbing, for instance (Burston 2005). Likewise, dubbing can develop speaking skills in general (Danan 2010; Talaván and Costal 2017; Alonso-Pérez and Sánchez-Requena 2018), and it can be proposed as a self-learning task (Wakefield 2014), being presented as an additional task to be prepared at home.

A novel application of AVT modes is the integration of accessibility modes into the teaching of EFL. Former research on the assessment of their didactic potential in foreign language (FL) education includes Talaván, Lertola and Ibáñez Moreno (2022), who focus on the use of subtitling for the deaf and hard of hearing (SDH) or audio description (AD) to improve their learners' oral and writing skills. SDH has also proved its effectiveness in the enhancement of integrated skills (Talaván 2019) and it has been successfully used in bilingual educational contexts. Likewise, AD has lately gained more attention and has been used to foster vocabulary acquisition and oral and writing skills (Lertola and Talaván 2016; Navarrete 2020): the time limitations of this mode make the students condense the message into a coherent and detailed narration, which implies a careful choice of words. Voice over is another mode that, despite needing further research, is a promising field, especially to enhance speaking skills (Talaván and Rodríguez-Arancón 2019).

The recent incorporation of two or more AVT modes to make the most of this methodology and encourage Foreign Language (FL) students' learning stands out. For instance, some studies combine subtitling and dubbing to enhance L2 speaking skills (Talaván and Ávila-Cabrera 2015; Lertola, 2019a)) or to develop pragmatic awareness (Lertola and Mariotti, 2017). Other scholars concentrate on accessibility modes including AD and SDH tasks (López-Cirugeda and Sánchez-Ruiz 2013; Herrero, Sánchez-Requena, and Escobar 2017), or integrate an accessibility mode, like AD, with subtitling and dubbing for the development of translation skills (Incalcaterra McLoughlin 2009), although these are the less explored fields within AVT didactics.

2. Theoretical framework

Over the past years, the Council of Europe has been promoting multilingualism through new educational policies, and this has led to a proliferation of valuable research-led

projects that study AVT for language teaching and learning such as Learning Via Subtitling (LeViS 2006-2008), ClipFlair (2011-2014), Intralingual Dubbing to Improve Oral Skills (iDub 2014), VICTOR (2018), and PluriTAV (2021). Although these projects and their websites are no longer operational, except for ClipFlair, it is worth mentioning the crucial role that technology plays in all these projects. From the technological and software development point of view, the discipline of didactic AVT has experienced a dizzying advance in the last decade, especially in terms of subtitling (Ruiz 2018) and this can be seen, for example, in ClipFlair, where the learner can manipulate the video itself thanks to the multimodal resource, and develop free and easy-to-use software for audio editing, include subtitles, or use platforms that integrate these functionalities (Sokoli 2015).

The increasing importance of Information and Communication Technologies (ICTs) in education can be proved by the fact that it is almost impossible to find teachers who do not count on audiovisual and technological material to present the contents of teaching and learning units, particularly in universities involved in distance education in different European countries (Jordano de la Torre, 2011). Over the last two decades, research has focused on fostering visual literacy and digital communication through the use of AVT tasks. Didactic AVT relies on a great variety of professional software and applications such as Aegisub (a free subtitle editing software that allows editing, spotting and translating, among others, with a user-friendly interface) or Lightworks (a professional non-linear editing system for editing and mastering digital videos) to create and carry out the different tasks of the learning units, thus integrating technologies in the teaching/learning process. This is in line with the use of didactic platforms, which has become an incredible solution both in face-to-face and online environments. Moodle has been the platform used for introducing the lesson plans and then uploading the tasks in the case of the project presented here, TRADILEX.

The TRADILEX Project (Audiovisual Translation as a Didactic Source in Foreign Language Education) has as its main objective to determine the improvement in EFL by using didactic AVT. A total of nine Spanish universities have participated in the test of the methodology offered by the project. This paper presents the results of the TRADILEX experience carried out with students of Engineering and Architecture at the University of Zaragoza (Spain) who had a B1 level of English, according to the Common European Framework of Reference for Languages (CEFR). The project ran between October and December 2021, with all the steps being marked in a schedule of 12 weeks. The recruitment of students was done on a voluntary basis and the results obtained were counted as 45% of the final mark, which corresponds to the percentage allotted to the practical part of the subject “Inglés Técnico”. The attendance was not compulsory for those students who signed up; and although they could not drop out at the mid-module point, there were a few cases, a low drop-out rate, who did. They admitted not being able to complete the modules in the set deadlines. All participants went through the whole process individually and in an online environment. The materials used for listening, reading, writing and speaking were selected on the basis of their authenticity. The videos used for the AVT tasks were not created for pedagogical purposes, which allows to offer students a real use of language output.

3. Methodology

The present methodological proposal of a didactic sequence combines five AVT modes and their sequencing for long-term use, with the aim of developing integrated skills in the foreign language (English, in this case). The use of ICTs was present all the way from the start to the final questionnaire. The first step was the design of a Moodle platform, through which a total of 54 students were guided with instructions and 40 of them completed all the tests and tasks, as well as two questionnaires (final and initial).

The approach contained several data collection instruments, in which the measuring tools were the initial and final questionnaires (qualitative data), AVT assessment rubrics and two tests of integrated skills (quantitative data).

3.1. Initial questionnaire

The initial questionnaire, to be completed in week 1 by each student in Google forms, provided a profile of the participants, of their initial level of English and their familiarity with AVT modes: 95% of the students were between 18 and 30 years old; they were mainly male (77.5%), all native speakers of Spanish; 62.5% had no certificate of their level of English and 20% stated they had a certificate for B1 level; 97.5% had never done, in or outside class, any activity involving AVT (subtitling, dubbing, etc.) to improve their level of English. Most of them (92.5%) showed interest in participating in the project. Moreover, 70% admitted they did not know the main modes of AVT which contribute to accessibility, namely AD and SDH. Moreover, 30% stated that their personal use of audiovisual materials to improve their English is regular or frequent.

The students' familiarity with AVT ranked somewhat low; in a scale of 1-6, it scored 3.55. When asked about their technological skills, they answered that they did not see themselves as being good at ICTs (2.7). Their expectations as to whether the AVT tasks in the different modes can contribute to improve their level of English were also low (2.9). A similar result (2.85) was obtained when they were asked whether AVT tasks in the different modes can improve their motivation in learning or whether the different modes can contribute to improve their technological skills in general (2.6).

3.2. Initial Test of Integrated Skills (ITIS)

As a second step, students had to take an Initial Test of Integrated Skills (ITIS). As Couto-Cantero, Sabaté-Carrové, and Gómez Pérez (2021,78) state, “the ITIS is an essential preliminary step aiming to verify and certify that the students' actual initial level of competence in EFL is in accordance with a B1 level of the CEFRL”. This test

integrates mediation in all the language skills, as can be seen in the reception section of the ITIS test, where students had to rephrase a text to make it understandable to other users. The descriptive scheme of a recently revised version of the CEFR Companion Volume features the role of mediation (Council of Europe 2020, 35):

(...) very often when we use a language, several activities are involved; mediation combines reception, production and interaction. Also, in many cases, when we use language, it is not just to communicate a message, but rather to develop an idea through what is often called “*linguaging*” (taking the idea through and hence articulating the thoughts) or to facilitate understanding and communication.

Therefore, more weight is generally given to the role of mediation in EFL learning, understood as the language activity of rephrasing a text, orally or in writing, for the purpose of making it comprehensible to speakers of other languages (Couto-Cantero, Sabaté-Carrové, and Gómez Pérez 2021). Learners “construct or convey meaning in order to make others able to access a particular text. This process allows learners to become mediators and to employ the language in meaningful communication activities” (Talaván and Lertola 2022, 27).

A total of four sections with two parts for each section composed the ITIS. The estimated duration of the test was two hours (30’ for each section). A carefully thought-out order was conceived, starting with oral reception, followed by written reception and continuing with oral production and written production.

For each of the parts in the oral production test, students were asked to watch and listen to a video. Then they had to record a 1:30-2:00 minute talk explaining the contents in their own words. To record this speaking task, they had to use the audio recording Vocarooⁱ and record their answer.

In the written production section, instructions were given in each part. In the first question a reading task, ‘Country kids’, was provided and students were asked to write a 100-150

word essay on a similar topic, ‘Pros and Cons of country life for teenagers’. Some suggestions were given as to how to organise their writing and give their opinions.

In the second question students were asked to convince the reader to read a book or watch a film. The instructions provided examples of constructions that could be used for the persuasive arguments. The writing was expected to be between 100 and 150 words long.

The platform provided an automatic correction for the oral and written reception parts, immediately accessible to the student. The oral production part was corrected manually by researchers of the project, following an assessment rubric where five aspects were evaluated: pronunciation and intonation, range of vocabulary, grammar, fluency and general coherence. Students were assessed on a 4-point scale ranging from poor to excellent, as shown in Table 1. Moreover, a bottom section intended to give specific feedback to students was added, with the purpose of better informing them of possible weak points that needed improvement.

Table 1. Rubric for the oral production test in the ITIS

	Poor (0-0.5)	Adequate (0.6-1)	Good (1.1-1.5)	Excellent (1.6-2)
Pronunciation and intonation				
Range of vocabulary				
Grammar				
Fluency				
General coherence				
TOTAL				
FEEDBACK				

A similar rubric was devised for the assessment of the written production test (Table 2):

Table 2. Rubric for the written production test in the ITIS

	Poor (0-0.5)	Adequate (0.6-1)	Good (1.1-1.5)	Excellent (1.6-2)
Spelling				
Grammatical precision				
Punctuation				
Word usage				
Text composition, coherence and cohesion				
TOTAL				
FEEDBACK				

These two rubrics were also used in the Final Test of Integrated Skills (FITIS). The assessment of the same aspects permitted a quantitative analysis of the results from the ITIS and the FITIS, revealing the differences and the progression, if any, at the end of the project.

3.3. Modules. Lesson plans

Once students had completed the ITIS, they had to carry out a didactic sequence in the form of 15 lesson plans distributed into 10 weeks (week 2 to 11 of the project). These lesson plans were organised into five modules that corresponded to five different AVT modes: subtitling, voice over, dubbing, and the accessibility modes of AD and SDH. These modules consisted of three lesson plans and each of them included a final task based on the AVT mode of the module (see Table 3). All these tasks presented an active use of a video within an ICT context that “provides a high degree of authenticity to the FL learning process” (Couto-Cantero, Sabaté-Carrové, and Gómez Pérez 2021, 75) and they were guided and modulated, ranging from the easiest to the most difficult tasks. Thus, students progressed through the fifteen lesson plans moving from an easy guided task to a more advanced task that involved more autonomy and creativity on

their part. This increase in the level of difficulty justifies that the students had one week for completing the first two lesson plans and the same amount of time for the last lesson plan of the module (Table 3).

Table 3. Students' tasks and timeline of the project

Students' tasks		Timeline
Task name	Task description	
Initial questionnaire		Week 1
ITIS	Oral reception Written reception Oral production Written production	Week 1
Module 1:	LPS1 → basic	Week 2
	LPS2 → intermediate	Week 2
Subtitling	LPS3 → advance and creative	Week 3
Module 2:	LPVO1 → basic	Week 4
	LPVO2 → intermediate	Week 4
Voice over	LPVO3 → advance and creative	Week 5
Module 3:	LPD1 → basic	Week 6
	LPD2 → intermediate	Week 6
Dubbing	LPD3 → advance and creative	Week 7
Module 4:	LPAD1 → basic	Week 8
	LPAD2 → intermediate	Week 8
AD	LPAD3 → advance	Week 9
Module 5:	LPSDH1 → basic	Week 10
	LPSDH2 → intermediate	Week 10

SDH	LPSDH3 → advance	Week 11
Final questionnaire		Week 12
FITIS	Oral reception Written reception Oral production Written production	Week 12

In the first module, subtitling, there were three lesson plans with a final subtitling task. In the final task of LPS1 a subtitle file was provided. It presented English subtitles already created with some gaps that the students had to fill in. Although students were provided with a basic guideline of subtitling norms and they also counted on a tutorial on how to use the subtitling software Aegisub, this simple listening task helped them to get familiar with the restrictions, limitations and norms of this AVT mode and a type of software they had not used before. In LPS2, the final task was divided into two: first, students had to work from a template where the timing of the subtitles had already been done and had to be respected, but they had to fill in the pre-made subtitle ‘slots’ with the English word(s) missing. Lastly, LPS3 involved more difficulty, as the students had to do the spotting and generate their own subtitles for a full clip. In this task, students continued with intralingual subtitling, English into English, but writing a complete creative script including humoristic elements for that clip.

From week four to five, students worked with voice-over modality and the software for carrying out the tasks was Screencastify, a free video editing digital tool that can be downloaded onto a browser. In LPVO1, students had to produce the voice over of the second half of an English clip, as the first half was given as an example. In LPVO2, students continued doing intralingual translation, they had to do the voice over of the full 1-minute video, reducing and reformulating the English source text when needed.

Finally, as in the case of the first module, in LPVO3, students were given a task based on creative intralingual AVT, as they had to invent new dialogues (different from the source text) to produce a comic effect and provide a voice-over narration of the 1-minute clip with these new dialogues in English.

In the dubbing module, LPD1 consisted in dubbing in English a short extract of a clip in English. The script was already provided and students only had to change some words from it. In LPD2, they had to perform intralingual dubbing on their own, creating the dubbing script first in English and then replacing the voices of the characters. Finally, in the final task of LPD3, students had to rewrite and dub the source text (a video in English) into English in a creative way, to make it funny or interesting.

The last two modules, module 4 (week 8 and 9) and module 5 (week 10 and 11), dealt with the accessibility modes of AD and SDH, respectively. In LPAD1, students were given the first half of an audio described video clip in English and they had to audio describe the second half in English. The English audio description of a complete 1-minute clip came in LPAD2. This task evolved in LPAD3, when the students had to audio describe in English a video that included short dialogues in English, being aware of the time available and being limited by the silent gaps where the AD had to be placed.

In the last module students came back to the AVT mode of subtitling, although there were some differences in this occasion due to its accessible nature. In LPSDH1 students had intralingual translation English into English and they had to fill in the gaps in the subtitles to get familiarised with SDH, as they did in the first task of the first module, i.e., subtitling. In LPSDH2, they continued working on intralingual subtitling and they were required to complete all the subtitles in English of a 1-minute SDH clip in which the spotting was already provided. Finally, LPSDH3 consisted in creating their own

SDH subtitles in English for a clip, also in English, where both the spotting and the translation were not given.

These five modules can also be grouped into two according to the type of software used. First, modules 1 (subtitling) and 5 (SDH), based on subtitling tasks, used Aegisub. Second, modules 2 to 4, which required voicing clips and, in some cases, lowering the volume of the original soundtrack, relied on Screencastify, which was introduced to the students with a basic guideline to help them complete the tasks.

The same classification into two can be applied to the types of assessment rubrics used for the lesson plans. Although different rubrics were used, some aspects were recurrent depending on whether the rubrics belonged to modules 1 and 5, or modules 2 to 4. The former concentrated on aspects such as accuracy and appropriateness of the translated text, condensation strategies, appropriate segmentation and synchrony; the latter, in turn, focused on aspects more related to oral skills, such as linguistic accuracy, pronunciation and intonation, fluency and speech rate.

3.4. Final Test of Integrated Skills (FITIS)

Once the group of students finished the tasks of the 15 lesson plans, in week 14 they were asked to carry out the FITIS, designed to determine the validity of the use of these AVT tools in the students' development of their communicative competence in EFL. The structure of the test ran parallel to that of the ITIS, also consisting of four sections with two parts for each section and following the same order of completion: oral reception, written reception, oral production and written production. Both the ITIS and the FITIS combined a variety of tools: voice recording, in which the use of Vocaroo was required, video watching (clips with a duration of 1':30"-2':00") or writing (100-150 words). In sum, the FITIS was a single test, completed online, where all the skills were integrated and mediation was given an important place. As this paper shows below, in the final

questionnaire students provided a very positive assessment of the initial and final tests, stating that they found them useful to learn about their progression in learning EFL along the project.

4. Results

This section offers an analysis of the results obtained in the lesson plans and in the ITIS and FITIS.

With regard to the results in the lesson plans, Table 4 shows the average of the marks achieved in each of the lesson plans of the five modules. It reveals an improvement from lesson plan 1 to lesson plan 2 in four out of the five modules with the exception of SDH. In the modules of subtitling and dubbing, the most common AVT modes, it is also observed that the mark obtained in lesson plan 3 is lower than in lesson plan 2. This can be explained by the fact that in lesson plan 3 the task involved creative AVT and students depended on their own abilities and skills as they could not count on any aid or example to follow as in the first two lesson plans of the module. However, in the last modules of the project, an improvement from lesson plan 1 to lesson plan 3 was found, which can be the result of the continuous undergoing training. This development from lesson plan 1 to lesson plan 3 is reflected in four out of five modules. The only case in which this does not happen is in the module of subtitling, which might be explained by the fact that it was the first module.

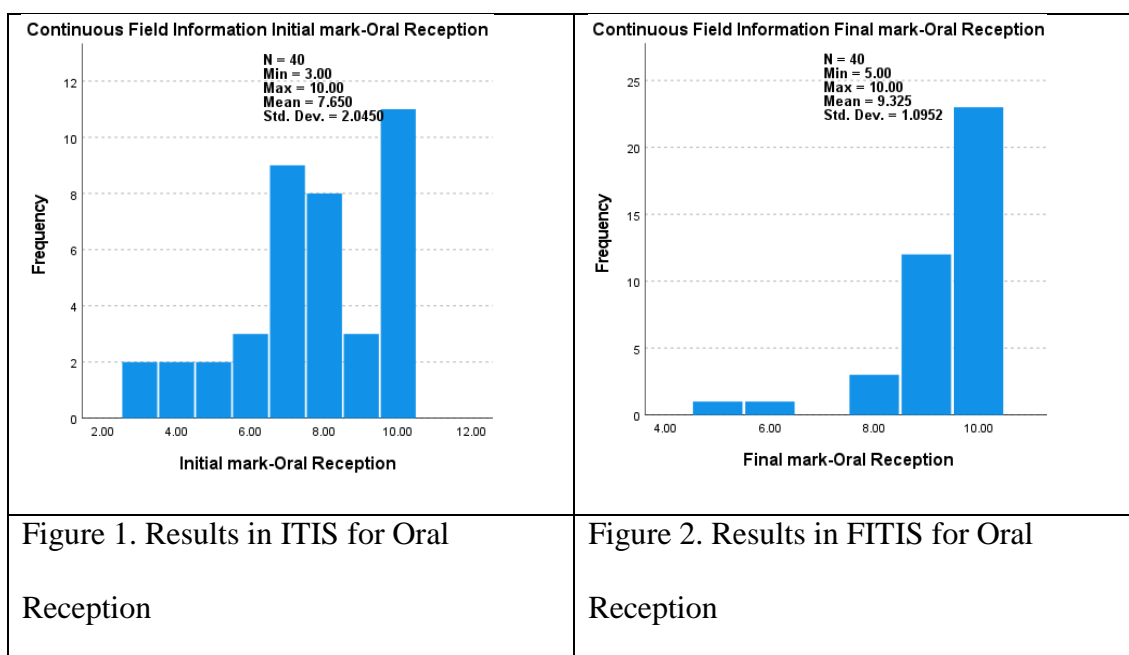
Table 4. Average of results in the lesson plans of the five modules. A total of 40 students completed each module.

Subtitling			Voice Over			Dubbing			AD			SDH		
LP1	LP2	LP3	LP1	LP2	LP3	LP1	LP2	LP3	LP1	LP2	LP3	LP1	LP2	LP3
7.53	8.15	6.85	7.1	7.84	8.42	8.78	9.13	9.1	8.87	9.13	9.30	7.1	6.71	7.18

A comparison between the results in the ITIS and the FITIS would determine the degree of the students' progress in learning with the aid of AVT tools. To proceed to an in-depth statistical analysis, the SPSSⁱⁱ software was used.

Figure 1 below shows the students' results in the oral reception test (listening comprehension) of the Initial Test. The marks obtained range between 3 and 10; 4 students did not reach the pass mark (5) and the overall average was 7.650.

Figure 2 shows the results in the Final Test for the same skill. A noticeable improvement can be observed in these histograms, where the minimum grade is 5 (1 student) but the greatest majority (35 students) obtained a mark of 9 or 10. The average for oral reception in the FITIS reached 9.325, an increase of 21.8% over the average grade in the ITIS.



In order to see if there were significant differences between the results obtained in the ITIS and the FITIS, a non-parametric analysis of dependent samples using the Wilcoxon test was performedⁱⁱⁱ.

Once the comparison was made between the marks obtained by the 40 students in the Initial and the Final Test, it can be observed that the bilateral asymptotic significance is 0.001, less than 0.05, which indicates that the null hypothesis of the lack of differences between the two groups should be rejected, T (Test Statistics)= 402,500, p (Asymptotic Sig.)= 0,001.

The histograms in Figure 3 show the degree of improvement in the marks (positive difference in blue bars) of 26 students, reaching between 6 and 8 points in the case of 4 students. Negative difference (in green bars) indicate a moderately lower mark in oral reception in the final test (3 students); and 11 students showed no positive or negative difference (number of ties).

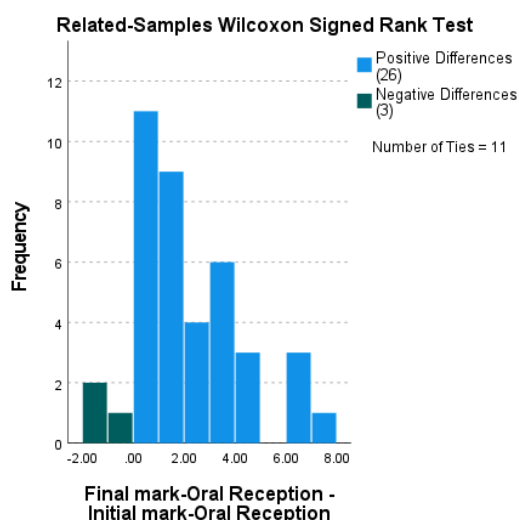
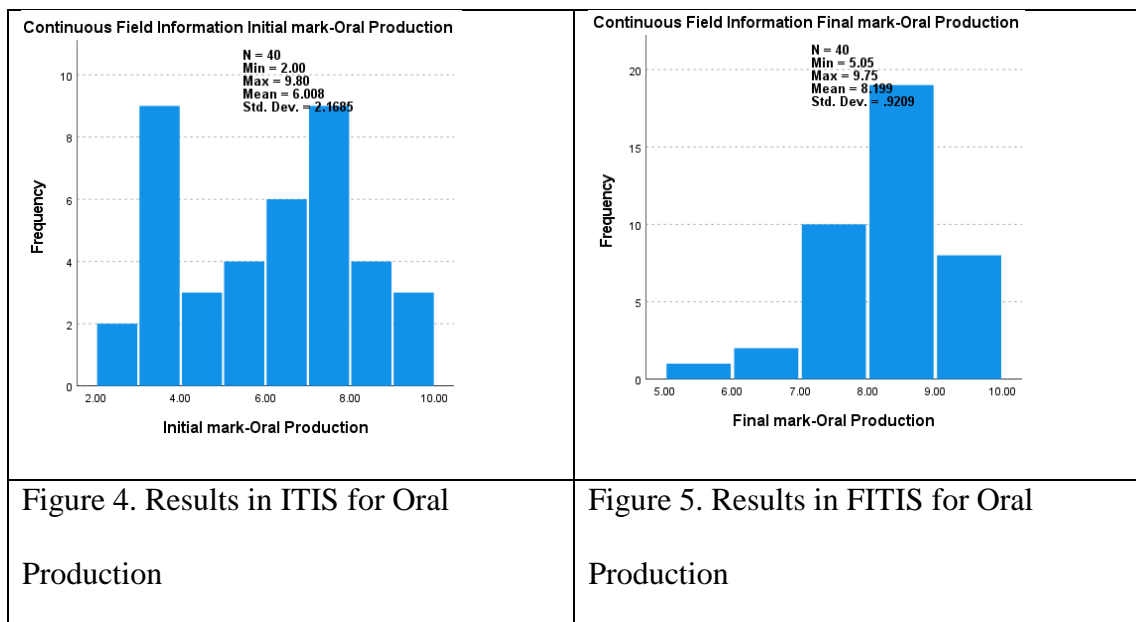


Figure 3. Comparison of positive and negative differences in Oral Reception

Figure 4 shows the students' results in oral production (speaking) in the Initial Test. 14 students did not reach the pass mark (5) in this skill, a clear warning that it needs reinforcing, proving the neglecting treatment of oral production in previous educational stages. The average is 6.008, lower than the one obtained in oral reception.

Figure 5 displays the results in the Final Test for the same skill. A remarkable improvement can be observed, with all students having passed the test this time and 27

(67.5%) achieving a mark between 8 and 10. The average has risen to 8.19, an increase of 36.31% over the average grade in the ITIS.



Comparing the results of improvement between oral reception and oral production it is noteworthy that the latter are more positive (the average is higher).

The histograms in Figure 6 below show the degree of improvement in the marks (blue bars) of 34 students, reaching between 3 and 5 points more than in the ITIS in the case of 14 students. Green bars indicate a moderately lower mark (mostly one point less) in oral reception in the final test of 6 students.

A comparison of the histograms in Figures 3 and 6 reveals that the number of students that improved their marks in oral production surpassed those that improved their marks in oral reception.

This shows the advantages of using this methodology as a didactic tool to improve the results in oral skills, with a particular reinforcement in oral production.

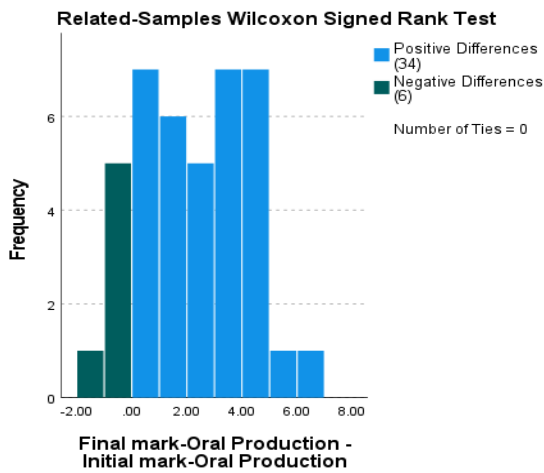


Figure 6. Comparison of positive and negative differences in oral production

As far as written reception (reading comprehension) is concerned, Figure 7 indicates that all the marks in the Initial Test are over the pass, ranging from 6 to 10. These good results as a starting point show that students are well trained in this skill, the average reached being 8.975, the best result for any skill in the Initial Test.

Figure 8 shows the results in the Final Test for the same skill. A moderate improvement can be observed in these histograms, where the minimum mark obtained is 7. The average for written reception in the FITIS reached 9.250, an increase of 3.06% over the average grade in the ITIS (the lowest degree of improvement of all skills).

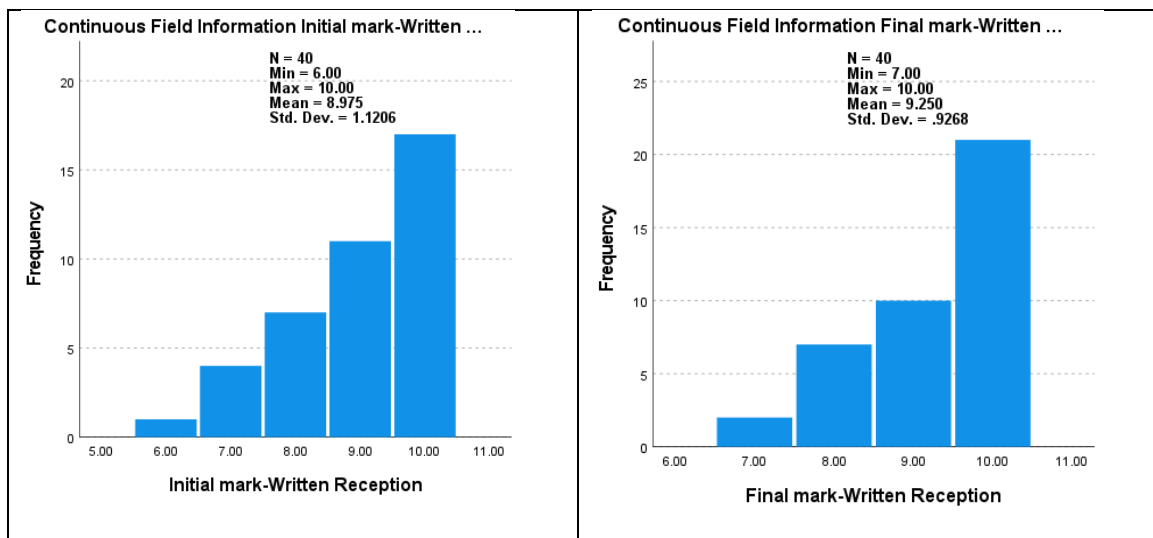


Figure 7. Results in ITIS for Written Reception

Figure 8. Results in FITIS for Written Reception

Once the comparison has been made between the marks obtained by the 40 students in the ITIS and FITIS, it can be observed that the bilateral asymptotic significance is 0.156, higher than 0.05, which indicates that there are no statistically significant differences between the groups and the null hypothesis should be retained, $T = 154,500$, $p = 0,156$.

The histograms in Figure 9 show the degree of improvement in the marks (positive difference in blue bars) of 14 students, many of them (10) rising one point. Negative difference (in green bars) indicate a moderately lower mark in written reception in the final test of 7 students (5 of them lowering one point); and 19 students remained the same (ties).

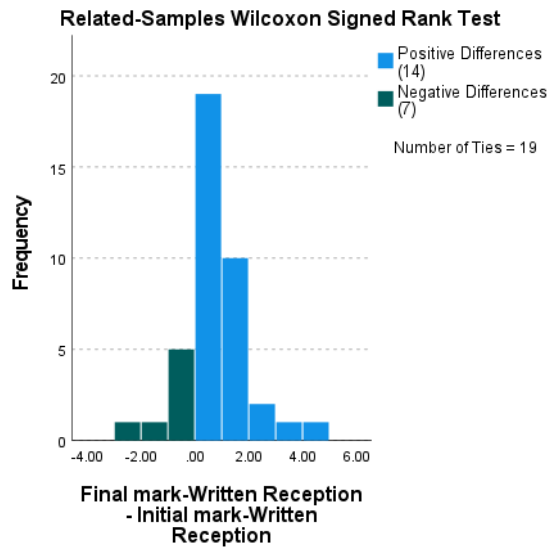


Figure 9. Comparison of positive differences and negative differences in Written Reception

Figure 10 shows the students' results in written production in the Initial Test. Even though 2 students did not reach the pass mark (5) in this skill, the rest obtained a mark of over 7. The average is 7.950, lower than the one obtained in written reception.

Figure 11 shows the results in the Final Test for the same skill. All marks are over 7, but most interestingly, 31 (77.5 %) rank between 8 and 10 and 17 (42.5 %) between 9 and 10.

The average has risen to 8.724, an increase of 9.76% over the average grade in the ITIS.

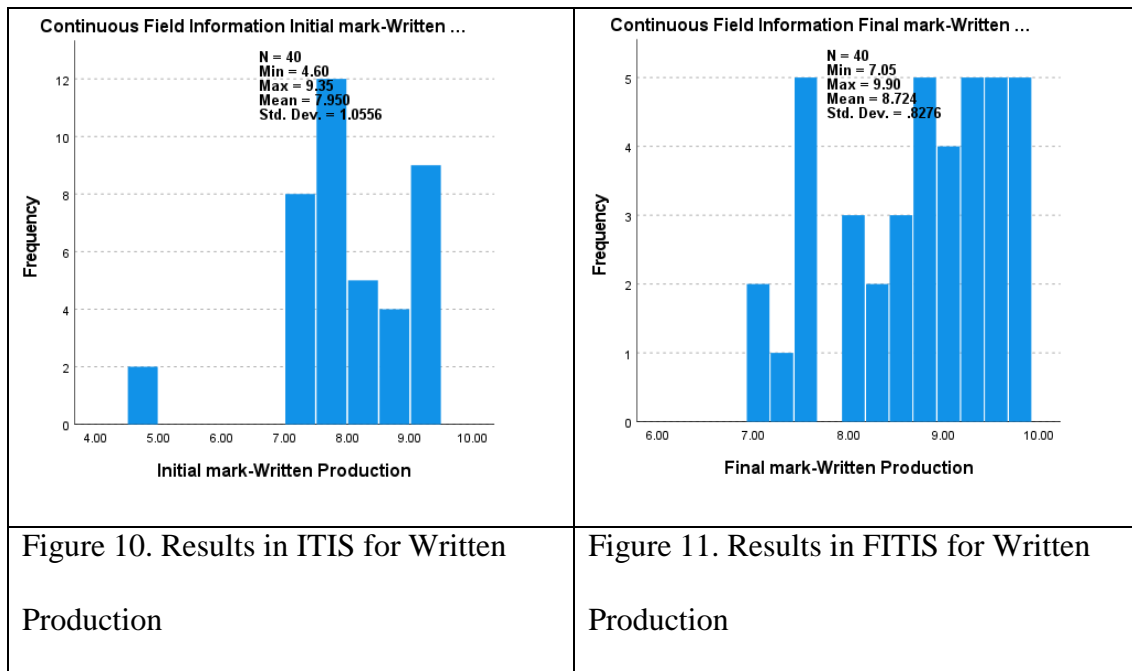


Table 9 below summarises the data obtained with a Wilcoxon test, performed to detect any significant differences between the results obtained in the initial test (ITIS) and the final test (FITIS).

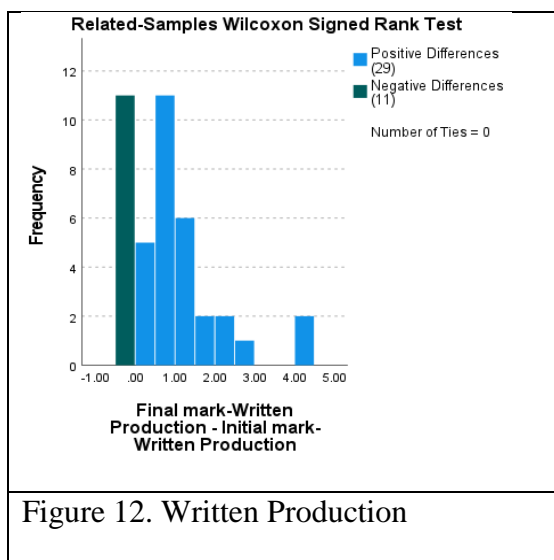
Table 9. Summary of Related-Samples Wilcoxon Signed Rank Test

Table 5. Oral Reception		Table 7. Oral Production	
Total N	40	Total N	40
Test Statistic	402,500	Test Statistic	773.000
Standard Error	45,917	Standard Error	74.389
Standardized Test Statistic	4,029	Standardized Test Statistic	4.880
Asymptotic Sig. (2-sided test)	<.001	Asymptotic Sig.(2-sided test)	<.001

Table 6. Written Reception		Table 8. Written Production	
Total N	40	Total N	40
Test Statistic	154.500	Test Statistic	723.500
Standard Error	27.516	Standard Error	74.382
Standardized Test Statistic	1.417	Standardized Test Statistic	4.215
Asymptotic Sig.(2-sided test)	.156	Asymptotic Sig.(2-sided test)	<.001

As can be seen, in oral reception, oral production and written production (Tables. 5, 7 and 8), once the comparison was made between the marks obtained by the 40 students in the Initial and the Final Tests, the bilateral asymptotic significance is 0.001 (less than 0.05), which indicates that the null hypothesis that there are no differences between the two groups should be rejected. In the case of written reception, however, these differences are not statistically significant.

The histogram in Figure 12 shows the degree of improvement in the marks (positive difference in blue bars) of 29 students, many of them (17) rising between 0.5 and 1.5 points. Negative differences (in green bars) indicate a moderately lower mark in written production in the final test of 11 students (all of them lowering 0.5 points).



A comparison of positive and negative differences in the four skills (Figures 3, 6, 9 and 12), shows that productive skills (oral and written) display a higher number of positive differences, which implies there were more cases of students who increased their marks. The results show clearly that productive skills score lower than receptive skills, both in the ITIS and in the FITIS. It may still be the case that, in teaching English to students at a pre-university stage, grammar, vocabulary and reading tasks related to a textbook continue to be the most commonly practised activities, both inside and outside the classroom (Plo, Hornero and Mur 2014, 74).

Moreover, comparing the results of improvement between oral reception and oral production it is noteworthy that the latter are more positive, its average of improvement standing out over the rest: 36.31%, despite having obtained the lowest score at the point of departure (ITIS). This answers to the need of more frequent practice in the speaking skill, perceived both by students and teachers as the least practised skill in class (Plo, Hornero, and Mur 2014). This methodology could indeed help overcome students' reluctance to speak by providing a reason to communicate, focusing on topics of their interest and allowing them to work, both in a collaborative environment or with a flexible timetable through the online tasks.

5. Students' perceptions about the process, the results and their satisfaction with the TRADILEX experience

The final part of the project involved the students' completion of a final questionnaire distributed in Google forms and hosted in the Moodle platform. Its aim was to assess the students' opinion about the process, the result and their satisfaction.

a) Concerning the process, students were asked to assess:

1. the educative platform used. When asked about the degree of clarity of the educative platform, being 1 very confusing, 2 confusing, 3 a bit confusing, 4

acceptable, 5 clear and 6 perfectly clear, the average scored was 4.85, that is, between acceptable and clear.

2. the instructions about the lesson plans. As for the degree of clarity of the instructions for the different AVT modes, the average scored 5.09 –with the same scale as point no.1. Therefore, the instructions were clear to the participants.
3. whether the sequencing of tasks had been adequate, following the order: subtitling, voice over, dubbing, AD and finally SDH, and being 1 I totally disagree, 2 I strongly disagree, 3 I disagree, 4 I agree, 5 I strongly agree and 6 I totally agree, the average scored 4.6. The students considered the order adequate.
4. tutorials of the software recommended. For the degree of clarity of these tutorials the average scored was 2.90 (between confusing and a bit confusing, with the same scale as point no.1). This should need a revision in the near future, when the platform is open publicly. This result could also mean that tutorials are not enough for learning the use of these software programmes and that a lesson devoted to the explanation of their use would be necessary.
5. the time they needed to complete a lesson plan. More than half (53.6%) needed between 60' and 90'; 20% needed between 90' and 120'; 12,5% needed more than 120' and 15% could complete the lesson plans in less than 60'.

b) Secondly and with regard to the results, students were asked to what extent they perceived that their language skills had improved and what abilities were developed with the use of this methodology.

1. When asked whether the result of their work in the AVT tasks had improved as the project advanced, being 1 I totally disagree, 2 I strongly disagree, 3 I disagree, 4 I agree, 5 I strongly agree and 6 I totally agree, the average scored 4.97. Therefore, the students strongly believed that work in the AVT tasks improved as the project advanced.

2. As to whether the Initial and Final Test of Integrated Skills were useful for the students to know their evolution in learning EFL along the project, the average obtained was 4.6, in the above-mentioned scale. Their perception was positive in this regard.
3. The answers provided about the improvement in the different skills after carrying out the AVT tasks were very positive, ranging from listening (4.97), speaking and mediation (4.75), reading (4.73) to writing (4.36), in a descending order, although with slight variation. Oral skills seem to have been more benefitted, in the students' opinion. This coincides with the results obtained in a comparison of results between the FITIS and the ITIS.
4. When asked about the improvement in their technological skills the average was 3.70, which may indicate that something else could be done in this respect, or perhaps that the students of the School of Engineering did not find it difficult to keep up with the technological demands. This could also be in line with the fact that the Covid-19 pandemic has had an impact on our students, who were forced to familiarise themselves with the educative platform Moodle and applications like Google forms, the one used in the design of the lesson plans. However, it has to be pointed out that most students admitted not knowing either the editing applications of Aegisub and Screencastify or the online voice recorder Vocaroo.
5. Students were also asked to assess the usefulness of the AVT tasks to improve their communicative skills in English. Their perceptions set dubbing and AD as the most useful (4.73), followed by standard subtitling (4.60), SDH (4.51) and finally voice over (4.14).

In their view, dubbing (chosen by 80.48%) stands out as the AVT mode that most helps in oral production. In the case of written production, standard subtitling is seen as the most useful (85.36%). For oral reception (listening) voice over was

perceived as the most beneficial (73.17%). For written reception (reading) standard subtitling scored higher than the rest: 53.65%.

Students were also asked to assess from 1 to 10 the degree in which they had improved in the different skills. The skills that ranked highest (9 or 10) were listening (16) and speaking (14). In other words, they perceived that their oral skills had improved more than other skills along the project, grammar standing at the end. As stated above, perceptions and facts coincide, the oral production skill standing out in the level of improvement over the other skills.

c) Thirdly, and within the category of satisfaction, they assessed their levels of satisfaction with the project, the didactic use of subtitling and the didactics and interest in language learning.

1. To the question “I would like to go on learning foreign languages through AVT tasks” the average answer was 4.39, “I agree”. This shows the positive reception of the project in these students. They felt motivated during their work (4.14) and also showed general agreement (4.73) on the idea that AVT contributes to a more autonomous learning of EFL.
2. AVT has been clearly regarded by the group as a useful resource to learn English (4.78), a resource that could be implemented in other educational institutions, outside university, public and private (4.65).
3. There is also agreement that it would be convenient to include AVT tasks as a didactic resource for the learning of a foreign language (English) in the curriculum of Secondary Education (4.75) and even in Primary Education (4.58).

6. Conclusions

The TRADILEX project carried out at the School of Engineering and Architecture at the University of Zaragoza counted on a good number of participants (54 students), most of the initial number (40) having completed all the stages of the learning experience.

Results in the lesson plans illustrate that there is an improvement from lesson plan 1 to lesson plan 2 in modules 1 to 4, which shows that lesson plan 1 helped students to get used to the software and the AVT mode employed in the module. At the same time, there is no improvement from lesson 1 to 2 in module 5. In lesson plan 2 of module 5, SDH, students had an additional difficulty which was to be aware of the different sounds included in the clip and insert them in written form as subtitles. Although at the beginning students were provided with basic guidelines and strategies proper of this accessible mode, the time given to get familiarised and carry out the tasks seemed not to be enough, which could justify the decrease in the average results in this lesson plan. However, after familiarising themselves with the tasks, there was an improvement from lesson plan 2 to lesson plan 3, even improving the results obtained in lesson plan 1. Thus, in the future it should be considered to provide more extended guidelines that lead the students in lesson plan 2 and/or give extra time for carrying it out.

Finally, the modules of voice over and AD, focused on oral production, also show an improvement from lesson plan 2 to 3. These modules used revoicing techniques, which contributed to develop the students' oral skills. The good results revealed that it was easy for them to get familiarised with voice over and AD despite not being as popular as dubbing. By contrast, the results of modules 1 and 3, which were devoted to the most common AVT modes, were lower from lesson plan 2 to 3. This may indicate that the creative part in lesson plan 3, which conveyed a higher level of autonomy, was a handicap for some of the students, lowering their average results. All things considered, it is worth mentioning that there is an

evolution in terms of results from lesson plan 1 to 3 in 4 out of 5 lesson plans, proving students' improvement, which is confirmed by their FITIS results, as can be seen below.

Results in the ITIS show that the best average score was obtained in written reception (reading), an expected result, given that students usually practise this skill more than the rest. In the FITIS the best average marks were obtained in oral reception skills (listening), closely followed by written reception. This is clearly in line with former research work on the assessment of oral skills, which concluded that “although increasingly worked upon in class, *listening* exercises should be, however, reinforced by work done more extensively outside the class, with the aid of newly introduced authentic materials which can increase the total exposure time and raise the interest of the students” (Plo, Hornero and Mur 2014, 74). The TRADILEX experience allowed these students to be more exposed to oral reception skills, most particularly, as they stated in the final questionnaire, through the voice-over mode, which was perceived as the most beneficial for this skill.

A comparison between the results in the ITIS and FITIS can determine the degree of the students' progress in learning with the aid of AVT tools. The analysis shows the following increase over the average grade in the ITIS, in descending order: 36.31% in oral production, 21.8% in oral reception, 9.73% in written production and 3.06% in written reception.

The average obtained in the FITIS increased in the four skills. It is worth pointing out, however, that the degree of improvement in written reception is the lowest of the four.

The students' answers provided in the final questionnaire about the improvement in the different skills after carrying out the AVT tasks were very positive, which coincides with the statistical findings.

Productive skills scored lower than receptive skills, both in the ITIS and the FITIS. This points out clearly that the former need strengthening. However, the degree of improvement was remarkably higher in oral production, which stands out over the others. A comparison of

the results of improvement between oral reception and oral production reveals that the latter were more positive (the average of improvement was higher: 36.31%), as a matter of fact they were the highest of all the skills. A comparison of the histograms in Figs. 4 and 8 reveals that the number of students that improved their marks in oral production surpassed those that improved their marks in oral reception. This proves that the methodology used is efficient and serves the function of improving the students' oral production. Moreover, the students' perception that their oral skills had improved more than other skills along the project —grammar standing at the end—coincided with the quantitative results obtained.

In their view, dubbing stands out as the AVT mode that most helps in oral production. In the case of written production, standard subtitling was seen as the most useful, as reading subtitles in English increases considerably the input students receive. For oral reception (listening) voice over was perceived as the most beneficial. For written reception (reading) standard subtitling scored higher than the rest.

The final questionnaire that students completed gave a very positive perception of the ITIS and FITIS, stating that they found them useful to know their evolution in foreign language (FL) learning along the project. The students' answers in the final questionnaire also show their positive reception of the project. They felt motivated during their work and also showed general agreement on the idea that AVT contributes to a more autonomous learning of EFL. They even expressed their willingness to go on learning foreign languages through AVT tasks, which were clearly regarded by the group as a useful resource to learn English, a resource that in their opinion could be implemented in other educational levels.

As regards their knowledge of media accessibility AVT modes, namely AD and SDH, 70% admitted in the initial questionnaire that they did not know them. This experience has contributed to raise their awareness of the special needs of certain groups of

consumers, as well to consider the potential of these modes (AD and SDH) as didactic instruments, in line with the conclusions derived from earlier research on the matter (Talaván, Lertola, and Ibáñez Moreno 2022)

Finally, the methodology used in the project seeks to integrate ICT and AVT as didactic resources “to promote FLL in terms of audiovisual reception, production and mediation from an integrated perspective” (Talaván and Lertola 2022, 25)

The positive outcomes obtained in the TRADILEX experience with this group of university students may hopefully expand to far greater numbers of FL learners in the future, when the TRADILEX platform is ready to operate openly to the service of society. Likewise, the expansion may also be reflected in terms of incorporating other languages, *globalising* the project.

Yet, limitations of the study should be acknowledged. It was observed how the time given for following the tutorials and learning how to use the different types of software as well as for getting familiarised with the norms of the AVT modes should be increased. Students admitted that having a session devoted to these issues would be appreciated, as it would make them save a lot of time when completing the lesson plans. Finally, it has to be noted that the low drop-out rate was intrinsically related to presenting the project as a real reward for passing the subject; and consequently, attaching a sufficiently representative grade within the final mark may be seen as an extremely persuasive measure for engaging the students.

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ⁱ <https://vocaroo.com>

ⁱⁱ More information about statistical method used in Field (2009).

ⁱⁱⁱ The Wilcoxon non-parametric test was used after performing a normality test and a P-P plot test in all the results, checking that the data had a non-symmetrical distribution.